

Remarks

Claims 1, 3, 5-14, 16, 18-27, 29, 31-39, 42-48 and 51-58 are pending in this application. Claims 1, 14, 27 and 58 have been amended in various particulars as indicated hereinabove. Claims 4, 17, and 30 have been cancelled without prejudice or disclaimer.

Claims 1, 3-14, 16-27, 29-39, 42-48 and 51-58 were rejected under 35 U.S.C. 103(a) as being unpatentable over Malan *et al.* (US PGPUB 2002/0032871, hereinafter "Malan Application") in view of Poletto *et al.* (US PGPUB 2002/0032880, hereinafter "Poletto Application"). This rejection is respectfully traversed for the following reasons.

Each of the independent claims has been amended to include subject matter based on original claim 4, for example. Thus, the claims now require that the "differential characteristics [are] based on differential characteristics between request packets routed out of said network domain, and response packets routed into the network domain."

The new limitation is directed to the notion of monitoring incomplete flows, i.e., requests without corresponding response packets. This is used to determine the existence of a denial of service attack since the implication is that the receiving computers are overwhelmed, being unable to keep up with the requests.

The pending action takes the position that the Malan Application does not teach this functionality. Specifically, the pending Action, at page 4, provides:

7. Malan does not show wherein said monitor makes said determination based on differential characteristics of network traffic routed out of said first network domain relative to network traffic routed into said first network domain.

For relevant teachings, page 15 of the 60/230,759 application, parent to the Poletto Application, is cited. The following section from page 15 appears to be the most relevant:

Referring to FIG. 9, the monitoring process in the gateway 26 can examine 82 a ratio of ingoing to outgoing number of TCP packets for a particular set of machines, e.g. web servers. The monitoring process can compare 84 the ratio to a threshold value. The monitoring process can store 86 this ratio, time stamp it, etc. and conduct an ongoing analysis 88 to determine over time for example how much and how often it exceeds that ratio. As the ratio

This section merely provides that the ratio of incoming to outgoing packets is kept. Nothing suggests keeping the differential characteristics between request packets routed out of the network domain, and response packets routed into the domain.

Monitoring at the level of response to request packets, however, has the potential to provide better operation since a direct measure of the degree of overloading is generated and can be distinguished from the situation of machines simply downloading data in a largely one-way, albeit typical, operation.

For this reason, the pending claims contain features not present in the applied references and should be deemed patentably distinguishable over those references.

It is believed that the present application is in condition for allowance. A Notice of Allowance is respectfully solicited. Should any questions arise, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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